[Continued on next page]

(54) Title: REAL-TIME NETWORK SCHEDULED PACKET ROUTING SYSTEM
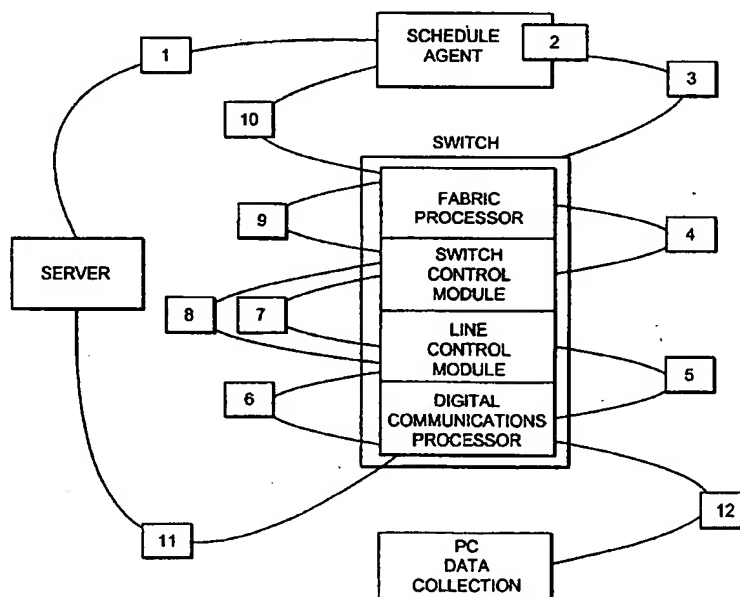
(57) Abstract: A system for guaranteeing bandwidth for transmitting data in a network. A path generation engine determines a
data paths across a network according to preselected criteria. A scheduling engine (2) determines schedule appointments for data
packets to traverse each link in the network including compensation for transmission delays and switch latencies. Scheduling data
is communicated to schedule-aware switches (3, 10) and endpoints so that appointment times are reserved for transmission of the
scheduled data packets. Real-time transmission of data can be guaranteed in both directions along the transmission path.

(88) Date of publication of the international search report:
27 February 2003

For two-letter codes and other abbreviations, refer to the "Guid-ance Notes on Codes and Abbreviations" appearing at the begin-ning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

	International application No.
	PCT/US02/17689

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7)   :G06F 15/16
US CL   : 709/203, 220, 223, 226, 228, 232; 707, 1, 2
According to International Patent Classification (IPC) or to both national classification and IPC

B.   FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. :   709/203, 220, 223, 226, 228, 232; 707, 1, 2

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
  Microsoft Computer Dictionary

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
  Please See Extra Sheet.

C.   DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 6,230,200 B1 (FORECAST et al) 08 May 2001, abstract, fig.2, col.5 line 45 to col.7 line 46, col.9 line 44 to col.11 line 57.	1-44
Y	US 6,044,367 A (WOLFF) 28 March 2000, abstract, fig.1B, col.5 line 42 to col.7 line 23, col.15 line 57 to col.18 line 51.	1-44

☐ Further documents are listed in the continuation of Box C.   ☐   See patent family annex.

* Special categories of cited documents:	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A" document defining the general state of the art which is not considered to be of particular relevance	
"E" earlier document published on or after the international filing date	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"O" document referring to an oral disclosure, use, exhibition or other means	
"P" document published prior to the international filing date but later than the priority date claimed	"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
03 SEPTEMBER 2002	1 0 DEC 2002
Name and mailing address of the ISA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231 Facsimile No. (703) 305-3230	Authorized officer Peggy Hamod
Form PCT/ISA/210 (second sheet) (July 1998)*	Telephone No. (703) 305-9648

B. FIELDS SEARCHED

Electronic data bases consulted (Name of data base and where practicable terms used):

WEST, STN, EAST, IEEE

Search terms: network, bandwidth reserved, communication paths, guaranteed delivery data, process threads, server and clients, packet flows, node, flow schedule